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(51) International Patent Classification <sup>6</sup> : <b>C12N 15/57, 9/64, 1/21, 5/10, 1/19, C07K 16/40, G01N 33/68, C12Q 1/37</b>		A2	(11) International Publication Number: <b>WO 99/41388</b>																																																																																					
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(21) International Application Number: <b>PCT/US99/03016</b>		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).																																																																																						
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(30) Priority Data: 60/074,310 11 February 1998 (11.02.98) US																																																																																								
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(72) Inventor; and (75) Inventor/Applicant (for US only): CERRETTI, Douglas, Pat [US/US]; 41607 North 197th Place, Seattle, WA 98133 (US).																																																																																								
(74) Agents: GARRETT, Arthur, S. et al.; Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).																																																																																								
(54) Title: METALLOPROTEASE-DISINTEGRINS SVPH3-13 AND SVPH3-17 DNA AND POLYPEPTIDES																																																																																								
(57) Abstract																																																																																								
<p>The invention is directed to purified and isolated novel SVPH3-13 or SVPH3-17 polypeptides, the nucleic acids encoding such polypeptides, processes for production of recombinant forms of such polypeptides, antibodies generated against these polypeptides, fragmented peptides derived from these polypeptides, and the uses of the above.</p>																																																																																								
<table border="1"><thead><tr><th>Marker (kDa)</th><th>2.4</th><th>4.4</th><th>7.5</th><th>9.5</th></tr></thead><tbody><tr><td>CEREBELLUM</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>CEREBRAL CORTEX</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>MEDULLA</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>OCCIPITAL POLE</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>FRONTAL LOBE</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>TEMPORAL LOBE</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>PUTAMEN</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>SPINAL CORD</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>AMYGDALA</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>CAUDATE NUCLEUS</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>CORPUS CALLOSUM</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>HIPPOCAMPUS</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>TOTAL BRAIN</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>SUBSTANTIA NIGRA</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>SUBTHALMIC NUCLEUS</td><td>+</td><td>+</td><td>+</td><td>+</td></tr><tr><td>THALAMUS</td><td>+</td><td>+</td><td>+</td><td>+</td></tr></tbody></table> <p>ACTIN ADAM 23 ADAM 22 (SVPH3-17) (SVPH3-13)</p>				Marker (kDa)	2.4	4.4	7.5	9.5	CEREBELLUM	+	+	+	+	CEREBRAL CORTEX	+	+	+	+	MEDULLA	+	+	+	+	OCCIPITAL POLE	+	+	+	+	FRONTAL LOBE	+	+	+	+	TEMPORAL LOBE	+	+	+	+	PUTAMEN	+	+	+	+	SPINAL CORD	+	+	+	+	AMYGDALA	+	+	+	+	CAUDATE NUCLEUS	+	+	+	+	CORPUS CALLOSUM	+	+	+	+	HIPPOCAMPUS	+	+	+	+	TOTAL BRAIN	+	+	+	+	SUBSTANTIA NIGRA	+	+	+	+	SUBTHALMIC NUCLEUS	+	+	+	+	THALAMUS	+	+	+	+
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Qy	229	ThrTrpThrGluLysAspGlnIleAspIleThrThrAsnProValGlnMetLeuHisGlu	248
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Qy	249	PheSerLysTyrArgGlnArgIleLysGlnHisAlaAspAlaValHisLeuIleSerArg	268
Db	1114	TTCTCAAATACCGGCAGCGCATTAAAGCAGCATGCTGATGCTGTGCACCTCATCTCGCGG	1173
Qy	269	ValThrPheHisTyrLysArgSerSerLeuSerTyrPheGluGlyValCysSerArgThr	288
Db	1174	GTGACATTTCACTATAAGAGAAGCAGTCTGAGTTACTTTGGAGGTGTCTGTTCTCGCACA	1233
Qy	289	ArgGlyValGlyValAsnGluTyrGlyLeuProMetAlaValAlaGlnValLeuSerGln	308
Db	1234	AGAGGAGTTGGTGTGAATGAGTATGGTCTTCCAATGGCAGTGGCACAAGTATTATCGCAG	1293
Qy	309	SerLeuAlaGlnAsnLeuGlyIleGlnTrpGluProSerSerArgLysProLysCysAsp	328
Db	1294	AGCCTGGCTCAAACCTTGAATCCAATGGGAACCTTCTAGCAGAAAGCCAAAATGTGAC	1353
Qy	329	CysThrGluSerTrpGlyGlyCysIleMetGluGluThrGlyValSerHisSerArgLys	348
Db	1354	TGCACAGAATCCTGGGGTGGCTGCATCATGGAGGAAACAGGGGTGTCCATTCTCGAAAA	1413
Qy	349	PheSerLysCysSerIleLeuGluTyrArgAspPheLeuGlnArgGlyGlyGlyAlaCys	368
Db	1414	TTTTCAAAGTGCAGCATTTTGGAGTATAGAGACTTTTTACAGAGAGGAGGTGGAGCCTGC	1473
Qy	369	LeuPheAsnArgProThrLysLeuPheGluProThrGluCysGlyAsnGlyTyrValGlu	388
Db	1474	CTTTTCAACAGGCCAACAAAGCTATTTGAGCCCACGGAATGTGGAAATGGATACGTGGAA	1533
Qy	389	AlaGlyGluGluCysAspCysGlyPheHisValGluCysTyrGlyLeuCysCysLysLys	408
Db	1534	GCTGGGGAGGAGTGTGATTGTGGTTTTTCATGTGGAATGCTATGGATTATGCTGTAAGAAA	1593
Qy	409	CysSerLeuSerAsnGlyAlaHisCysSerAspGlyProCysCysAsnAsnThrSerCys	428
Db	1594	TGTTCCCTCTCCAACGGGGCTCACTGCAGCGACGGGCCCTGCTGTAACAATACCTCATGT	1653



Qy 429 LeuPheGlnProArgGlyTyrGluCysArgAspAlaValAsnGluCysAspIleThrGlu 448  
 Db 1654 CTTTTTTCAGCCACGAGGGTATGAATGCCGGGATGCTGTGAACGAGTGTGATATTACTGAA 1713

Qy 449 TyrCysThrGlyAspSerGlyGlnCysProProAsnLeuHisLysGlnAspGlyTyrAla 468  
 Db 1714 TATTGTACTGGAGACTCTGGTCAGTGCCCAACAAATCTTCATAAGCAAGACGGATATGCA 1773

Qy 469 CysAsnGlnAsnGlnGlyArgCysTyrAsnGlyGluCysLysThrArgAspAsnGlnCys 488  
 Db 1774 TGCAATCAAATCAGGGCCGCTGCTACAATGGCGAGTGCAAGACCAGAGACAACCAAGTGT 1833

Qy 489 GlnTyrIleTrpGlyThrLysAlaAlaGlySerAspLysPheCysTyrGluLysLeuAsn 508  
 Db 1834 CAGTACATCTGGGGAACAAAGGCTGCAGGGTCTGACAAGTTCTGCTATGAAAAGCTGAAT 1893

Qy 509 ThrGluGlyThrGluLysGlyAsnCysGlyLysAspGlyAspArgTrpIleGlnCysSer 528  
 Db 1894 ACAGAAGGCACTGAGAAGGGAACTGCGGGAAGGATGGAGACCGGTGGATTTCAGTGCAGC 1953

Qy 529 LysHisAspValPheCysGlyPheLeuLeuCysThrAsnLeuThrArgAlaProArgIle 548  
 Db 1954 AAACATGATGTGTTCTGTGGATTCTTACTCTGTACCAATCTTACTCGAGCTCCACGTATT 2013

Qy 549 GlyGlnLeuGlnGlyGluIleIleProThrSerPheTyrHisGlnGlyArgValIleAsp 568  
 Db 2014 GGTCAACTTCAGGGTGAGATCATTCCAACCTCCTTCTACCATCAAGGCCGGGTGATTGAC 2073

Qy 569 CysSerGlyAlaHisValValLeuAspAspAspThrAspValGlyTyrValGluAspGly 588  
 Db 2074 TGCAGTGGTGCCCATGTAGTTTTAGATGATGATACGGATGTGGGCTATGTAGAAGATGGA 2133

Qy 589 ThrProCysGlyProSerMetMetCysLeuAspArgLysCysLeuGlnIleGlnAlaLeu 608  
 Db 2134 ACGCCATGTGGCCCGTCTATGATGTGTTTAGATCGGAAGTGCCTACAAATTCAAGCCCTA 2193

Qy 609 AsnMetSerSerCysProLeuAspSerLysGlyLysValCysSerGlyHisGlyValCys 628  
 Db 2194 AATATGAGCAGCTGTCCACTCGATTCCAAGGTAAGTCTGTTCTGGGCCATGGGGTGTGT 2253

Qy 629 SerAsnGluAlaThrCysIleCysAspPheThrTrpAlaGlyThrAspCysSerIleArg 648  
 Db 2254 AGTAATGAAGCCACCTGCATTTGTGATTTACCTGGGCAGGGACAGATTGCAGTATCCGG 2313

Qy 649 AspProValArgAsnLeuHisProProLysAspGluGlyProLysGly 664  
 Db 2314 GATCCAGTTAGGAACCTTCACCCCCCAAGGATGAAGGACCCAAGGGT 2361

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